

What is claimed is:

- SUB B1
1. An electrophotographic developer used in steps where it is fed from a developer carrier to develop an electrostatic latent image on an electrostatically charged-image holder and where the above developed image is transferred onto a transferring material, wherein it is used for the electrostatically charged-image holder described above having a radius of curvature of 18 mm or less in a development effective range and is a two-component developer comprising a toner comprising at least a binder and a colorant and a carrier which is coated with a resin and has a weight average particle diameter of 40 to 100 μm ; the above toner has a volume average particle diameter of 8 to 11.5 μm ; and the toner particles having a diameter of 6.35 μm or less account for 20 number % or less.
2. The electrophotographic developer as described in claim 1, wherein a variation coefficient in toner particle size distribution in terms of number in the toner described above is 35 or less.
3. The electrophotographic developer as described in claim 1, wherein the toner described above comprises toner particles having a diameter falling in a range of

4.00 to 5.04 μm in a range of 2 to 6 number % and toner particles having a diameter falling in a range of 5.04 to 6.35 μm in a range of 2 to 10 number %.

5 4. The electrophotographic developer as described in any of claims 1 to 3, wherein a charging series of the toner described above has a negative charging property.

10 5. The electrophotographic developer as described in any of claims 1 to 3, wherein the binder contained in the toner described above is a styrene base resin.

15 6. The electrophotographic developer as described in any of claims 1 to 3, wherein the carrier described above is an iron powder carrier.

20 7. The electrophotographic developer as described in any of claims 1 to 3, wherein the resin coating the carrier described above is a silicon-resin.

25 8. The electrophotographic developer as described in any of claims 1 to 3, wherein it is used for the electrostatically charged-image holder and the developer carrier which rotate in directions reverse to each other in the development effective range described above.

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9. An image-forming method comprising a step where an electrostatic latent image on an electrostatically charged-image holder is developed with a developer fed from a developer carrier and a step where the above developed image is transferred onto a transferring material, wherein the above electrostatically charged-image holder has a radius of curvature of 18 mm or less in a development effective range; the above developer is a two-component developer comprising a toner comprising at least a binder and a colorant and a carrier which is coated with a resin and has a weight average particle diameter of 40 to 100 μm ; the above toner has a volume average particle diameter of 8 to 11.5 μm ; and the toner particles having a diameter of 6.35 μm or less account for 20 number % or less.

10. The image-forming method as described in claim 9, wherein the developing step described above satisfies the following equation:

$$0.12 \leq \{(R_m + D_{sd}) \times k\} / R_d \times T \leq 0.35$$

wherein R_m represents a radius (mm) of curvature of the developer carrier; R_d represents a radius (mm) of curvature of the electrostatically charged-image holder in the development effective range; k represents a ratio

of a peripheral speed (mm/sec) of the developer carrier to a peripheral speed (mm/sec) of the electrostatically charged-image holder; Dsd represents a minimum proximity distance (mm) between the electrostatically charged-image holder and the developer carrier; and T represents a number % of the toner particles having a diameter of 6.35 μm or less.

11. The image-forming method as described in claim 9, wherein the electrostatically charged-image holder and the developer carrier rotate in directions reverse to each other in the development effective range described above.

12. The image-forming method as described in any of claims 9 to 11, wherein a variation coefficient in toner particle size distribution in terms of number is 35 or less.

13. The image-forming method as described in any of claims 9 to 11, wherein used is the toner described above comprising toner particles having a diameter falling in a range of 4.00 to 5.04 μm in a range of 2 to 6 number % and toner particles having a diameter falling in a range of 5.04 to 6.35 μm in a range of 2 to 10 number %.

14. The image-forming method as described in any of claims 9 to 11, wherein used is the developer in which a charging series of the toner described above has a negative charging property.

15. The image-forming method as described in any of claims 9 to 11, wherein the binder contained in the toner described above is a styrene base resin.

16. The image-forming method as described in any of claims 9 to 11, wherein the carrier described above is an iron powder carrier.

17. The image-forming method as described in any of claims 9 to 11, wherein the resin coating the carrier described above is a silicon resin.

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